

REMARKS

By the present amendment, claims 1 and 11 have been amended. Claim 2 has been cancelled. Upon entry of the present amendment, claims 1 and 3-20 will be pending in the Application.

The amendment to claim 1 is supported by the disclosure on p.160, lines 23-24. An insertion of "a substituent having" to claim 1 and 11 is supported by the disclosure on p.31, lines 17-25, to p.32, lines 1-15, and the examples of compound as R2-1 to R2-58.

In Paragraph 3 of the Office action, the claims are rejected under 35 USC 112, second paragraph, as being indefinite. Applicants submit that the amendment to claim 1 overcomes this rejection.

In Paragraph 5 of the Office action, Claims 11-20 were rejected under 35 U.S.C. 103(a) by the combination of Morita'756, Fukui'369, and Kudo'521.

In response to this rejection, Applicants are submitting a certified English translation of Applicant's relevant Japanese priority document (No.2003-28105). The certified translation, which has a priority date of February 5, 2003, will be submitted within the coming weeks. Doing so will enable Applicants to antedate the Kudo reference and thus remove Kudo as prior art against the present application.

Applicants believe that all rejections set forth in Paragraph 5 of the Office action have been overcome by submission of certified translation. However, Applicants additionally wish to argue against the substance of the rejections.

Morita does not disclose a compound of Applicants' formula (R2), and also does not disclose anything about an interval time. The interval time in the present invention means a time from separation of a photosensitive material from a heater of the thermal development unit to contact of a next photosensitive material as disclosed in p.165, lines 9-25 to p.166, lines 1-18 of Applicants' Specification.

The shorter the time interval, the more film sheets that can be developed rapidly. However it is not easy to shorten the interval time, because serious problems in photographic performance occur with conventional photothermographic materials, or an image forming apparatus may become larger and heavy to remedy the troubles as described in p.5, lines 5-25 to p. 6, lines 1-13.

Fukui does not disclose a compound of formula (R1) or (R2). Furthermore, Fukui does not disclose an image recording apparatus comprising an exposure section and a thermal developing section or an interval time.

Kudo does not disclose an image recording apparatus comprising an exposure section and a thermal developing section or an interval time. Kudo does not disclose or suggest that a compound of formula (R2) might be useful in an apparatus comprising an exposure section and a thermal developing section, and especially useful at a shorter interval time for continuous image forming.

In the present invention, the problem in continuous image forming by an interval time at 12 sec. or less was solved by the photothermographic material comprising a reducing agent (R1) and (R2), and it has become possible to make continuous rapid image forming.

Consequently, it is not obvious for the worker of ordinary skill in the art at the time to combine Morita'756, Fukui('369), and Kudo('521) to reach the present invention.

In Paragraph 6 of the Office action, Claims 1-10 were rejected under 35 U.S.C. 103(a) by the combination of Morita'756, Fukui'369, and Kudo'521.

As noted above, Applicants will soon be submitting a certified translation of their priority document. As such, the Kudo reference should be removed as prior art against the present application. Nevertheless, Applicants again wish to argue against the substance of the present rejection.

Morita does not disclose a compound of formula (R2) in the present invention. In Morita, the image recording apparatus is fundamentally different in its basic arrangement, because the exposure section and the thermal developing section is positioned to be separate in Morita, but positioned to be adjacent to each other in the present invention.

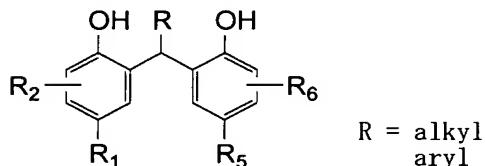
It is difficult to make the distance to 40 cm or less for Morita's arrangement, because the distance between a scanning position by a laser and an insertion portion of the thermal developing section in Fig.1 is about 1.2 fold longer than a film sheet (in a case of a larger size of film sheet in feeding section 110) or 1.8 fold longer than a film sheet (in a case of a smaller size of film sheet). As a film size is disclosed at

(14×2.54cm)×17×2.54cm), i.e.35.6cm×43.2cm at [0422] on p.49, the distance between the scanning position by a laser and an insertion portion of the thermal developing section in Fig.1 appears to be at least about 43 cm.

Furthermore, an exposing section and a thermal developing section are typically separated sufficiently from each other in order to avoid mutual detrimental influence, as described at p.4, lines 6-25 of the present application.

Consequently, it would be difficult for the worker of ordinary skill in the art at the time the invention was made to conceive the idea to shorten the distance to 40 cm or less.

Fukui('369) may possibly disclose a compound represented by formula (III), wherein Z is an alkylidene group or an aralkylidene group, of which the structure is shown below.



However, R is an alkenyl group, or an alkyl group having a substituent having an unsaturated bond in present invention, which are different from Fukui, and not disclosed in Fukui.

Fukui does not disclose a compound of formula (R2) nor (R1). Furthermore, Fukui does not disclose an image recording apparatus comprising an exposure section and a thermal developing section or the distance between a scanning position by a laser and an insertion portion of the thermal developing section.

Kudo does not disclose an image recording apparatus comprising an exposure section and a thermal developing section or the distance between a scanning position by a laser and an insertion portion of the thermal developing section. Kudo also does not disclose or suggest that a compound of formula (R2) might be useful in an apparatus comprising an exposure section and a thermal developing section, and especially useful when the distance between a scanning position by a laser and an insertion portion of the thermal developing section is equal to or shorter than 40 cm.

In present invention, the mutual detrimental influence between a scanning position by a laser and a thermal developing section was solved by the photothermographic material comprising a reducing agent (R1) and (R2), and as a result, a down sizing of the apparatus and a rapid image forming have been accomplished.

Consequently, it is not obvious for the worker of ordinary skill in the art at the time to combine Morita'756, Fukui('369), and Kudo('521) to reach the present invention.

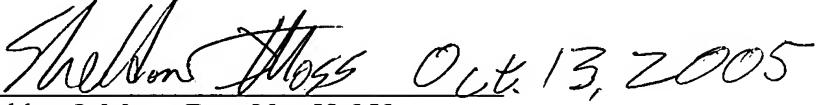
In Paragraph 7 of the Office action, Claim 1-10 were rejected under 35 U.S.C. 103(a) by the combination of Morita'756, and Fukui'369 or Kudo'521, and further Oyamada('381) or Yamane('427).

As noted above, Applicants will soon be submitting a certified translation of their priority document. As such, the Kudo reference should be removed as prior art against the present application. Moreover, the certified translation should remove the Oyamada and Yamane references as prior art against the present patent Application. Applicants therefore respectfully request that the present rejection has been overcome.

Appl. No. 10/768,038
Amendment dated October 13, 2005
Reply to Office Action of May 18, 2005

In view of the above amendments and remarks, claims 1 and 3-20 are hereby submitted in condition for allowance. An early and favorable action is respectfully requested.

Respectfully submitted,

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